



## Immediate implant placement and restoration in the fractured anterior maxillary teeth

So-Rae Seong\* , Byeong-Hoon Cho

*Department of Conservative Dentistry, Seoul National University, Seoul, Korea*

### I. Introduction

Traumatic fracture of anterior teeth is common during daily dental practice. Treatment of a fractured tooth involving the pulp includes the use of post and core with or without a crown, or extraction of the remaining part of the fractured tooth and replacement with a three-unit fixed partial denture or an implant.

Immediate implants are positioned in the course of surgical extraction of the tooth to be replaced. The percentage success of such procedures varies among authors from 92.7 - 98.0%. Its advantages with respect to delayed implantation include reduced post-extraction alveolar bone resorption, a shortening of the rehabilitation treatment time, and the avoidance of a second surgical intervention.

### II. Case Presentation

1. Sex/age: F/24
2. Chief Complaint (C.C): Fractured upper anterior teeth due to automobile accident 10 days ago
3. Past Dental History (PDH): #27 endodontic treatment, #46 gold crown restoration
4. Present Illness (P.I): #11 crown fracture and mid-root fracture, per (+), mob (+++)  
#12, 13, 21 crown fracture, per (+), mob (-)
5. Impression: crown and root fracture
6. Tx Plan: #11 extraction and immediate implant placement  
#12, 21 endodontic treatment, post and crown  
#13 resin restoration or crown

### III. Conclusion

As a result of trauma, increasingly more single incisors and canines are replaced by implants. The patients involved are often younger individuals who expect a short treatment period and have high esthetic demands. To reduce the treatment period, the implants are often placed at the time the damaged tooth is extracted. This procedure has proved functionally successful but has complicated the task of the surgeon because the procedure is often associated with an esthetically compromised result. Surgical techniques that offer improved soft tissue esthetics are thus required.